



AF/3654
JTW

TRANSMITTAL OF APPEAL BRIEF

Docket No.
TEI-0122

In re Application of: Ieyasu Kobayashi et al.

Application No.
09/914,033-Conf. #8235

Filing Date
August 22, 2001

Examiner
W. A. Rivera

Group Art Unit
3654

Invention: POLYESTER FILM ROLL

TO THE COMMISSIONER OF PATENTS:

Transmitted herewith is the Appeal Brief in this application, with respect to the Notice of Appeal filed: November 10, 2004.

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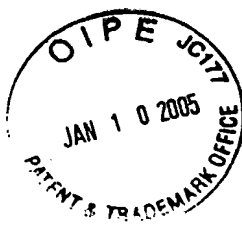
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Dated: January 10, 2005

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Docket No.: TEI-0122
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Ieyasu Kobayashi, et al.

Confirmation No.: 8235

Application No.: 09/914,033

Art Unit: 3654

Filed: August 22, 2001

Examiner: W. Rivera

For: POLYESTER FILM ROLL

APPEAL BRIEF

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

As required under 37 C.F.R. § 1.192(a), this brief is filed within two months of the Notice of Appeal filed in this case on November 10, 2004, and is in furtherance of said Notice of Appeal.

The fees required under 37 C.F.R. §1.17(c), and any required petition for extension of time for filing this brief and fees therefor, are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

This brief contains items under the following headings as required by 37 C.F.R. § 1.192 and M.P.E.P. § 1206:

- | | |
|-------|-----------------------------------|
| I. | Real Party In Interest |
| II | Related Appeals and Interferences |
| III. | Status of Claims |
| IV. | Status of Amendments |
| V. | Summary of Invention |
| VI. | Issues |
| VII. | Arguments |
| VIII. | Claims Involved in the Appeal |
| IX. | Evidence |
| X. | Related Proceedings |

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Appendix A Claims

I. REAL PARTY IN INTEREST

The real party in interest for this appeal is Teijin Limited of Osaka, Japan. An assignment of all rights in the present application to Teijin Limited was executed by the inventors and recorded by the U.S. Patent and Trademark Office at **Reel 012236, Frame 0719**.

II. RELATED APPEALS, INTERFERENCES, AND JUDICIAL PROCEEDINGS

There are no other appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. STATUS OF CLAIMS

A. Total Number of Claims in Application

There are 24 claims pending in the application.

B. Current Status of Claims

1. Claims canceled: None
2. Claims withdrawn from consideration but not canceled: None
3. Claims pending: claims 1-24
4. Claims allowed: None
5. Claims rejected: claims 1-24

C. Claims On Appeal

The claims on appeal are claims 1-24

IV. STATUS OF AMENDMENTS

Applicant did not file an Amendment After Final Rejection.

Applicant filed an Amendment in response to the first Office Action (mailed January 29, 2003) on April 29, 2003, following the filing of the national stage application on August 22, 2001. The Examiner responded to the Amendment with a Final Rejection mailed July 15, 2003. Applicant filed an Amendment After Final on October 14, 2003, and the Examiner responded by refusing to enter the Amendment in an Advisory Action mailed October 28, 2003. Applicant filed a Request for Continued Examination on November 14, 2003 and a Supplemental Amendment on November 21, 2003. A non-final Office Action dated January 28, 2004 rejected all pending claims, with all claim amendments having been entered. Applicant filed an Amendment in response to the new non-final Office Action on April 27, 2004. The Examiner responded with a Final Rejection on August 10, 2004, which is the subject of this Appeal.

Accordingly, the claims enclosed herein as Appendix A incorporates all amendments to claims 1-24.

V. SUMMARY OF INVENTION

The invention is directed to a polyester film roll having a dimension based on a claimed formula which is free from the generation of wrinkles and slacks on the film. The dimension of the polyester film roll is based on limiting the difference ("R") between the maximum diameter value and the minimum diameter value of the film roll to not more than $2W \times 10^{-3}$ and not more than $L \times 10^{-7}$ (wherein W is the width of the film roll, and L is the length of the rolled film). The maximum diameter value and minimum diameter value are determined by measuring all the diameters of the film roll along the width direction of the roll. The dimension of the polyester film roll can also be expressed via perpendicular lines as defined by the claims wherein the first maximum perpendicular line length is not more than 500 μm , and the second maximum perpendicular line length is not more than 300 μm . Other embodiments of the present invention include, but are not limited to, maintaining (1) the surface roughness ("Ra") of the polyester film to not less than 0.1 nm and not more than 10 nm, (2) the thickness of the polyester film to not less than 0.5 μm and not more than 20 μm , (3) the degree of rolling hardness of the film roll to not less than 90 and not more than 100, (4) the flexural modulus of the film roll core in the circumferential direction to not less than 13 Gpa. (5) the degree of surface roughness ("Rac") of the core to not more than 0.6 μm , and (6) the degree of surface hardness of the core to not less than 65 degree.

By maintaining the dimensions of the polyester film roll in accordance with formula defined in the claims, a polyester film roll free from wrinkles and slacks on the film can be obtained.

VI. GROUNDS OF REJECTION

1. Claims 1-3 and 16-18 are rejected under 35 U.S.C. §102(b) as being anticipated by Sasaki et al. (U.S. Patent 4,576,344).
2. Claims 4-15 and 19-24 are rejected under 35 U.S.C. §103(a) as being obvious over Sasaki et al. (U.S. Patent 4,576,344).

VII. ARGUMENT

In the Office Action of August 10, 2004, the following rejections were presented by the Examiner:

- (i) 35 U.S.C. §112, first paragraph

None

- (ii) 35 U.S.C. §112, second paragraph

None

- (iii) 35 U.S.C. §102

The Examiner rejected claims 1-3 and 16-18 under 35 U.S.C. §102(b) as being anticipated by Sasaki et al. (U.S. Patent 4,576,344).

To constitute anticipation of the claimed invention under U.S. practice, the prior art reference must literally or inherently teach each and every limitation of the claims. Here, in this

case, Sasaki et al. do not teach the claimed limitations “*said polyester film roll having a maximum diameter and a minimum diameter when all diameters of said roll are measured along the width direction of the roll, and the difference R between the maximum diameter value and the minimum diameter value is not more than $2W \times 10^{-3}$ and not more than $L \times 10^{-7}$, wherein W is the width of the film roll, and L is the length of the rolled film*” and “*wherein the first maximum perpendicular line length is not more than $500 \mu\text{m}$, and the second maximum perpendicular line length is not more than $300 \mu\text{m}$.*”

The Examiner has argued in the Action that since Sasaki et al. teach a polyester film roll free from wrinkles and because the width of the roll is uniform throughout the roll, the minimum diameter value of the Sasaki et al. film roll is not more than $2W \times 10^{-3}$ and not more than $L \times 10^{-7}$. However, the Examiner’s argument is flawed since the claimed invention focuses on the difference (“ R ”) between the maximum diameter value and the minimum diameter value and not on the uniform width of the roll.

Sasaki et al. only teach a polyester film roll free from wrinkles by specifying roll hardness (25 microns) and centerline average surface roughness (0.001 to 0.05 microns) of the film roll using a touch roll. The reference does not at all address the deformities (wrinkles and slacks) form in a film roll cause by accumulated unevenness as the film is being rolled. Thus, it is clear that Sasaki et al. do not literally teach all the limitations of claim 1.

Sasaki et al. also fail to inherently teach all the limitations of claims 1 and 16 since the Examiner cannot provide a basis in fact and/or technical reasoning to reasonably support that the claimed limitations “*said polyester film roll having a maximum diameter and a minimum diameter when all diameters of said roll are measured along the width direction of the roll, and the difference R between the maximum diameter value and the minimum diameter value is not more than $2W \times 10^{-3}$ and not more than $L \times 10^{-7}$, wherein W is the width of the film roll, and L is the length of the rolled film*” and “*wherein the first maximum perpendicular line length is not more than $500 \mu\text{m}$, and the second maximum perpendicular line length is not more than $300 \mu\text{m}$.*” necessarily flows from the teachings of the Sasaki et al.

As the Examiner already knows, the fact that a certain result or characteristic (“*wrinkle free*”) may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993). In relying upon the theory of inherency, the Examiner ***must provide a***

basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. In other words, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency may not, as applicable in this case, be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' " *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999).

In this case, the Examiner has not provided any basis in fact and/or technical reasoning to reasonably support the determination that the above noted limitations necessarily flows from the teachings of Sasaki et al. The Examiner notes the teaching of the width in Sasaki et al. disclosure but does not explain its relationship with the maximum and minimum diameters of the polyester film roll. The Examiner only concludes that Sasaki's invention has "*found a way*" to account for all the unevenness of the film and create a roll which is free from wrinkles. However, the Examiner does not cite the teachings of such "*a way*" in Sasaki et al. which reads on the limitations of the claims. Instead, the Examiner only concludes without any basis in fact and/or technical reasoning that the film roll of Sasaki et al. would meet the recitations of the claims.

The Examiner has also noted that "*if it is still the Applicant's position that Sasaki et al. does not meet the limitation, then Applicant must provide evidence as to why Sasaki et al. does not meet the claim.*" However, the Examiner has not yet established a *prima facie* case of anticipation that the prior art reference literally or inherently teach the limitations noted above.

Under §2131 of the Manual of Patenting Examining Procedure, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown (***by the Examiner***) in as complete detail as is contained in the ... claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

The Examiner has not met his burden of identifying "*in as complete detail as is contained in the claim*" where, in Sasaki et al., the limitations of the claims are taught or suggested either expressly or inherently. It should be noted that the key inventive concept of Sasaki et al. in obtaining a polyester film roll free from wrinkles is completely different than that

of the present invention. In Sasaki et al. the prevention of the formation of wrinkles comprises controlling the roll hardness (H) of the film roll to a value satisfying the relationship $H \geq 0.67x^3 - 10.61x^2 + 55.54x - 1.16$ wherein $x = \ln(1/Ra)$. Such a relationship is completely distinguishable from that of the present invention. Thus, it is not possible for the Examiner to establish any basis in fact and/or technical reasoning to reasonably support the determination that the above noted limitations necessarily flows from the teachings of Sasaki et al.

Thus, since Sasaki et al. fail to literally and inherently teach each and every limitation of claims 1-3 and 16-18, withdrawal of this rejection is respectfully requested.

(iv) 35 U.S.C. §103

The Examiner rejected claims 4-15 and 19-24 under 35 U.S.C. §103(a) as being obvious over Sasaki et al. (U.S. Patent 4,576,344).

To establish a *prima facie* case of obviousness, the prior art references must either alone or in combination teach or suggest the invention as a whole, including all the limitations of the claims. Since, for the reasons noted above, Sasaki et al. fails to teach or suggest all the limitations of claims 1 and 16 from which claims 4-15 and 19-24 depend, this rejection also cannot be sustained and should be withdrawn.

(v) Other
None

VIII. CLAIMS INVOLVED IN THE APPEAL

A copy of the claims involved in the present appeal is attached hereto as Appendix A. As indicated above, the claims in Appendix A do include the amendments filed by Applicant on April 27, 2004.

IX. EVIDENCE

No evidence pursuant to §§ 1.130, 1.131, or 1.132 or entered by or relied upon by the Examiner is being submitted.

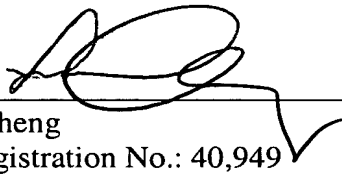
X. RELATED PROCEEDINGS

No related proceedings are referenced in II. above. Thus, no copies of decisions in related proceedings are provided.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 18-0013, under Order No. TEI-0122 from which the undersigned is authorized to draw.

Dated: January 10, 2005

Respectfully submitted,

By 
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APPENDIX A

Claims Involved in the Appeal of Application Serial No. 09/914,033

1. (Previously Presented) A polyester film roll in which a polyester film is rolled on a core, said polyester film roll having a maximum diameter and a minimum diameter when all diameters of said roll are measured along the width direction of the roll, and the difference R between the maximum diameter value and the minimum diameter value is not more than $2W \times 10^{-3}$ and not more than $L \times 10^{-7}$, wherein W is the width of the film roll, and L is the length of the rolled film.
2. (Original) The polyester film roll described in Claim 1, wherein the surface roughness Ra of the polyester film is not less than 0.1 nm and not more than 10 nm.
3. (Previously Presented) The polyester film roll described in claim 1, wherein the thickness of the polyester film is not less than 0.5 μm and not more than 20 μm .
4. (Previously Presented) The polyester film roll described in claim 1, wherein the degree of rolling hardness of the film roll is not less than 90 and not more than 100.
5. (Previously Presented) The polyester film roll described in claim 1, wherein the polyester film is a film comprising polyethylene terephthalate or polyethylene 2,6-naphthalenedicarboxylate.
6. (Previously Presented) The polyester film roll described in claim 1, wherein the difference Rc between the maximum value and the minimum value is not more than 300×10^{-6} m, when the roll diameters of the core are measured along the width direction of the core.
7. (Previously Presented) The polyester film roll described in claim 1, wherein the roll shape of the core is a crown shape whose central portion is thick and whose both end portions are thin.
8. (Previously Presented) The polyester film roll described in claim 1, wherein the core is a fiber-reinforced plastic core.

9. (Previously Presented) The polyester film roll described in claim 1, wherein the flexural modulus of the core in the circumferential direction is not less than 13 Gpa.

10. (Previously Presented) The polyester film roll described in claim 1, wherein the degree of surface roughness R_{ac} of the core is not more than 0.6 μm .

11. (Previously Presented) The polyester film roll described in claim 1, wherein the degree of surface hardness of the core is not less than 65 degree.

12. (Previously Presented) The polyester film roll described in claim 1, wherein the polyester film is a film used for the support of a magnetic recording medium.

13. (Original) The polyester film roll described in claim 12, wherein the magnetic recording medium is a digital recording method magnetic recording medium.

14. (Previously Presented) The polyester film roll described in claim 12, wherein the magnetic recording medium is a magnetic recording medium whose magnetic layer is a ferromagnetic metal thin film layer.

15. (Previously Presented) The polyester film roll described in claim 12, wherein the polyester film has a coating layer on the side on which the magnetic surface is disposed and the surface with the coating layer is rolled in the inner side.

16. (Previously Presented) A polyester film roll in which a polyester film is rolled on a core, said polyester film roll having a plurality of diameters obtained from measurements along the width direction of the roll, said plurality of diameters being represented by a curved line having two ends, said plurality of diameters comprising a maximum diameter and a minimum diameter, said maximum diameter being represented by a first maximum perpendicular line length which is determined by a straight line drawn connecting both ends of the curved line, and a first perpendicular line with respect to said straight line drawn from the maximum convex area of said curved line to said straight line, said minimum diameter being represented by a second maximum perpendicular line length which is determined by a second perpendicular line with respect to said straight line drawn from the maximum concave area of said curved line to said straight line,

wherein the first maximum perpendicular line length is not more than 500 μm , and the second maximum perpendicular line length is not more than 300 μm .

17. (Original) The polyester film roll described in Claim 16, wherein the roughness R_a of at least one of the surfaces of the polyester film is 1 to 10 nm.

18. (Original) The polyester film roll described in Claim 16, wherein the thickness of the polyester film is 2 to 10 μm .

19. (Original) The polyester film roll described in Claim 16, wherein the degree of rolling hardness of the film roll is 90 to 100.

20. (Original) The polyester film roll described in Claim 16, wherein the width of the film roll is not less than 300 mm, and the rolled length of the film roll is not less than 4,000 m.

21. (Original) The polyester film roll described in Claim 16, wherein the polyester film is a film comprising polyethylene terephthalate or polyethylene 2,6-naphthalenedicarboxylate.

22. (Original) The polyester film roll described in Claim 16, wherein the polyester film roll is supplied for a magnetic recording medium.

23. (Original) The polyester film roll described in Claim 22, wherein the polyester film roll is supplied for a magnetic recording medium whose magnetic layer is a coating type.

24. (Previously Presented) The polyester film roll described in Claim 16, wherein the first maximum perpendicular line length is not more than 400 μm , and the second maximum perpendicular line length is not more than 200 μm .